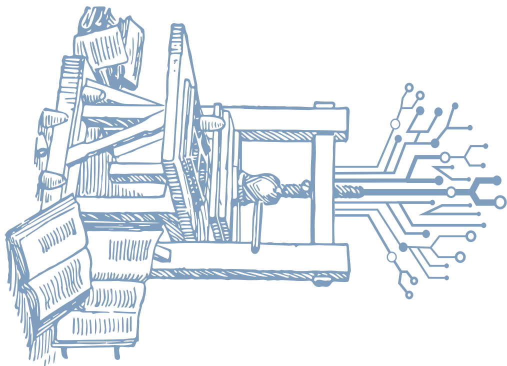

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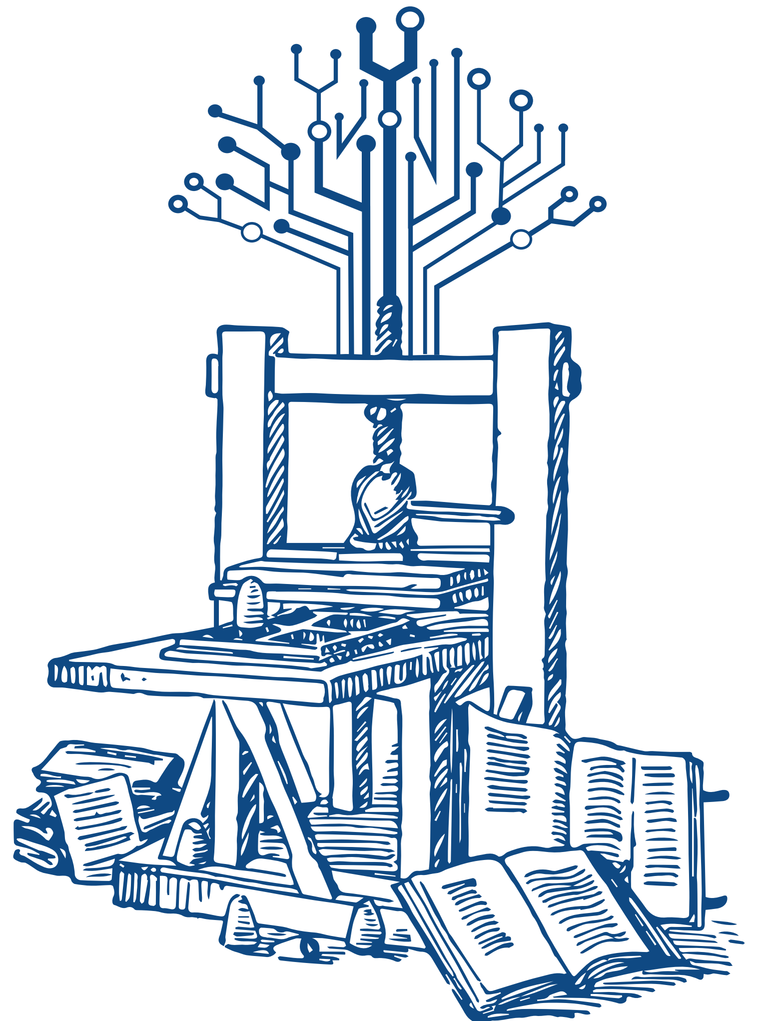

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On Dying for and Dying from Education: A Polemic Drawn from Plato's *Apology*

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The beginning of the second decade of the twenty-first century featured this controversial number by Columbia University professor, Mark C. Taylor, *Crisis on Campus: A Bold Plan for Reforming our Colleges and Universities* (2010). It was predated by the no less telling *Saving Higher Education in the Age of Money* (2005), *University Inc.: The Corporate Corruption of Higher Education* (also 2005), and other turn of the century criticisms.[1]

We hear a lot of talk today on campuses about higher education being in a state of crisis. And technology understood as *technē* – the efficiency of means over ends – occupies the center and circumference of such talk. As my former teacher and mentor, Dominic Balestra, noted, the contemporary university is dominated by *technē* such that the efficiency of teaching and scholarship means is not just prioritized but is prioritized precisely by separating the means from the final end or purpose they were meant to serve. The

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technē (art, skill, technique) of teaching – since that is all I'll have time to present – has been reduced to a series of measurable assessments of the "outcomes" and the means that higher education now serves, some of the most prominent among these "outcomes" and means being those catalogued by bloated career services departments that keep records of alumni placement and upward mobility.

While in deep sympathy with all that tends to be said regarding our flawed model or broken system of higher education, my claim in what follows is that this is not a crisis but, instead, perhaps an enduring tragedy or catastrophe. In presenting my reasons for why this situation in turn of the century United States higher education is undesirable but not a crisis, I offer a polemic drawn from pages 19b – 22e of Plato's "Apology." In the pages of this classic of Ancient philosophy, I suggest that Plato already expressed the concern regarding the construal of education as a mere *technē*, a mere means to achieving the type of professional lives that the many popularly believe education should prepare them to pursue – lives that enable those who occupy them to achieve a particular view of the good life, namely, a view of the good life subordinated to the acquisition of means. Whether or not one agrees that such similarities between Plato's time and our own exist, I hope to provoke critical inquiry into the consequences of higher education when professional training is made the model of University education.

1. The Efficiency of Means in Contemporary United States Higher Education

Perhaps we can identify 1869 as the year when higher education in the United States ceased to be about formation and became entirely about professional preparation. In 1869, Charles Elliot published an essay called "The New Education" in the *Atlantic*. It began by recounting the lament of a parent

that college didn't fit his boy, because his boy wasn't going to be a preacher or a professor and yet he wasn't learning any skills that would translate into a professional life. Eliot's essay basically agreed with dad and suggested remaking colleges to provide professional training. Eliot became president of Harvard in October 1869 and began to put his ideas into place. He gutted the core and tried to make the college entirely elective (later, majors and distribution requirements would be introduced to bring some order to the anarchy). He also created professional schools like Law and Medicine that required a BA to enter (prior to that, you could study law or medicine right out of high school) and so on. Even Elliot's deep commitment to research was understood by him as a kind of pre-professional training for future professionals.[2]

Regardless of whether one prefers this speculative dating or another, a kind of parasitic relationship governs this prioritization of the efficiency of means in higher education. Our culture increasingly views education as a means to achieving the means tacitly believed to reflect (a view of) the good life, and our universities increasingly capitulate to that common view of the good life held by the many. As the aforementioned books convey through their titles, such capitulation is evidenced as universities and colleges more and more overtly become corporations. Universities increasingly consider students as consumers while students (they and their paying parents) increasingly view the university as a place that provides the skills and credentials for getting on in the material and economic world, which they see as the same as achieving (a view of) the good life.

Two general dimensions of the prioritization of the *efficiency of means* in higher education emerged into prominence. First, the corporation increasingly prioritizes

efficiency in the transmission of knowledge; it replaces tenure-track professor positions with adjuncts and on-ground classes with online classes, retracts departments for which there is less and less student demand, redirects those funds, and so on. Cutting costs devoted to good education, stable sources of advising and mentoring, etc., allows money to be redirected to enhance already quite sophisticated amenities and professional programs.[3] Second and correlatively, universities market themselves to their consumer base via these amenities and practical professional programs rather than the humanities. In William Deresiewicz's words, from his recent and rightly lauded *Excellent Sheep*:

> But the worst effect of the commercialization of higher education is the way that it has changed how institutions see their students. Now they think of them as 'customers,' people to be pandered to instead of challenged … The customer service mentality is also responsible for the profusion of swanky new dorms, gyms, and student centers – a building boom that … was financed by a mountain of debt and that has been a major factor in tuition growth. Colleges now sell themselves to kids in terms of what they can give them, not what they plan to expect of them … Instead of humanities, students are getting amenities.[4]

Programs of studies are themselves a means for the university to attract students. Programs of studies thus also become means in the form of degrees that represent skill sets that will make students employable. And, having giving the consumers what they paid for, programs of studies supply the market with the forces that themselves hold sway over this parasitic relation governing contemporary higher education.

It is now such common knowledge that we no longer need statistical evidence to defend the claim that greater and

greater numbers of students enter into and graduate with STEM oriented majors, while fewer and fewer students enter into and graduate with traditional humanities majors.[5] In order to "assess" how successfully colleges and their programs deliver the promised goods, the ethos of *technē* as the prioritization of the efficiency of means over ends touches program and curriculum development directly. Accreditations agencies such as The Western Association of Schools and Colleges (WASC) and The New England Association of Schools and Colleges (NEASC) hold colleges and universities accountable (to the efficiency of means paradigm) by conducting reviews of program and core curriculum models and the learning outcomes that govern the courses serving some program or some part of the core curriculum. The curriculums themselves reflect the broader view of the university as the place that provides the means to market viability of and for graduates. Hence, the accreditation agencies ensure that education aligns with the market viability of and for the graduate. In short, curriculums and universities fashion themselves in line with the market forces they reflect.

These features of higher education are distinguishable but inseparable because the learning outcomes are aimed toward purportedly providing students the requisite skills or papers needed to be chosen to fill the market – to get a job. Universities and programs that can be shown to fill the markets with their products (or students) will become, themselves, more marketable and, thus, more desirable commodities. As Deresiewicz aptly writes, "education isn't something you consume; it is an experience that you have to give yourself over to. But colleges don't think like that anymore. They see themselves as supplying a market, not guarding a public trust."[6] The industry of higher education increasingly treats education as a mere means to achieving some means that itself enables graduates to achieve social and

material means. But to what end? Some notion of happiness conflated with pleasure? A return to the university on its investment after it has given the student a means by which to get a return on her or his investment?[7] In any case, it seems to be increasingly safe to say that the point of this *technē* of higher education – this prioritization of the efficiency of means – is that more consumers means more money for the corporation; more money means fancier dorms, fitness centers, food-courts, science and technology centers; more amenities means more customers, more students trained to excel in financially lucrative endeavors means more able donors, and so the cycle of efficient means – *technē* – goes on.

But, is this state of higher education in the twenty-first century really a state of crisis? Doubtless, the institutions of higher education have capitulated to a view of themselves as a means to the narrow materialistic view of the good life. But even if a prioritization of the efficiency of means permeates and dominates the university culture; and even as institutes of higher education appear to accept the view of themselves as but a tool – an instrumental means or *technē* to achieve professionalism – do we really have a system in crisis?

My suggestion is perhaps less sanguine. The conditions just described present problematic features of contemporary models of higher education. But they're not new problems and the situation isn't a crisis.

If we take crisis to mean an impending potential shift with an expected or suspected negative outcome, then I think that we are not witnessing a crisis of higher education today. Part of my claim is motivated by a conceptual consideration about whether or not crisis can conceptually entail a past. I do not think a crisis can have a past; a crisis can extend over a limited amount of time but either it resolves favorably or leaves behind an aftermath – sometimes catastrophic or tragic.

The situation regarding contemporary fretting over the state of higher education is justified not because we're in crisis, but because the details of today are manifestations of a centuries old tragic or catastrophic view of education as a *technē* divorced from the ends it was meant to serve. Leaving aside the view of education as *ex ducere* (leading forth) or *educare* (rearing or bringing up children to hold new affections and understandings),[8] educational systems long have simply reflected a pandering to the common view of the good-life and its correlative expectations for education and what the system of higher education should provide. And insofar as the common view imitates the view of those with wealth and power, it is no surprise that most public figures in the United States (such as Marco Rubio and Betsy DeVos) decry university culture beyond the vocational benefits one draws from contemporary higher education.

2. A Culture of "Calliases"

Plato's "Apology" recounts Socrates' defense of his practice of philosophy against the accusations that he, Socrates, "does injustice and is meddlesome … by making the weaker argument the stronger and by teaching others the same things" (19b). In these few pages of Plato's "Apology," Socrates calls the charge "slander" no fewer than six times; after noting that he cannot find any one person in particular to question about this trumped up charge, he makes two moves at the beginning of his *apologia* or defense. First, he distances himself from the practice of sophistry that he finds implied in the charge. Second, Socrates traces the source of this slander to his engagement with the sources of power and respect in Athenian society – the occupants of those paradigmatic professions thought to indicate an achievement of a certain view of the good life and, thus, a certain kind of wisdom.

Plato presents the sophists according to their characteristic activity of teaching young people how to excel

in the correct use of words, to make the weaker argument the stronger. That is their art (here *technē* in the sense of *technique*). They're concerned not with the truth of whatever matter is under consideration; they're concerned with winning an argument for the purposes of acquiring or preserving power, glory, or riches. The famous sophist, Protagoras, marketed himself and his skills this way.[9] So Plato's characterization is apt. Socrates notes clearly that the claim that he makes the weaker argument the stronger and teaches that art (*technē*) for a fee equates to the claim that he is a sophist. Socrates, however, neither undertakes to teach people nor charges a fee for dialoguing with another. As such, he's not a sophist – by definition.[10]

Socrates' counterargument begins, interestingly, with the claim that it is, "a fine thing to be able to teach people" (19e). While Socrates notes that it's, "a fine thing to be able to teach people," he subtly and quickly shifts the topic by raising an important nest of questions: Who is teaching what to whom and how? The manner in which he raises the question seems to be a bit of a throw away – a story perhaps thought to be included for dramatic plot development. But perhaps this story is quite central and maybe even *the* framing issue of Plato's "Apology."

Seemingly mixed with his reasons for asserting that he's not, by definition, a sophist, Socrates trails off into an anecdote about having heard that there's a man visiting Athens – a "wise man from Paros." This wise man from Paros – itself a place known to have been a large financial contributor to the Athenian confederacy[11] – had been spending time with the notoriously wealthy Athenian, Callias. Of Callias, we're further told that he has two sons and that, "he has spent more money on sophists than all the others [in Athens]" (20a). With the anecdote set up and the listener distracted, Plato delivers the nest of questions (Who is

teaching what to whom and how?) in the form of the questions Socrates puts to Callias:

> Callias, … if your two sons had been born colts or calves, we would have been able to get … an overseer for them who could make the two of them noble and good in their appropriate virtue [excellence], and he would have been someone … skilled with horses or skilled in farming. But, as it is, since they are two human beings, whom do you have in mind to get as an overseer for the two of them? Who is knowledgeable in such virtue [excellence], that of human being and citizen? For I think you must have given thought to this since you have two sons. Is there such a person? (20b)

Callias replies unequivocally that there is such a person, "Evenus … from Paros, and his fee is five minas" (20b). Callias has just committed himself to two claims. First, he identifies Evenus as a sophist, for he teaches people for a fee. Evenus charges, in fact, a hefty fee, for at that time a mina equated to 100 drachmas and a day-laborer would earn a drachma a day.[12] Second, and most importantly, Callias has claimed that Evenus teaches one how to become noble and good according to the appropriate virtue of human being and being a citizen (for that was Socrates' question). Putting the claims together, the sophists are believed commonly by the many to be teachers paid to oversee the development of people toward the noble and good for human being and citizen.

Socrates' response to Callias' answer seems a tad curious at first. Socrates describes Evenus' exorbitant tuition as a "moderate fee," thus signaling (and beyond sarcasm) his belief that the art [*technē*] of teaching young people how to become noble and good human beings and citizens is paramount. However, Socrates places one condition on this

assessment of Evenus' fee, namely, that Evenus "really possess this art [*technē*]" (20c). Indeed, Socrates goes so far as to say that if he, Socrates, possessed such a skill [*technē*] that he would be happy and proud and that Evenus, too, must be happy and proud – assuming he really possesses this skill. The question concerns less, I think, whether or not Evenus or any sophist in general competently or expertly conveys information and a skill set. Rather, the issue concerns whether or not Evenus, or any sophist in general, has the correct pedagogical end or goal in view, i.e., has a worthwhile understanding of the noble and good for human being and citizen. Put better, the issue concerns whether or not a sophist has not divorced his *technē*, i.e., art of teaching, from its very goal or the purpose of education, namely, providing the noble and good for human being and citizen.

Without developing any of these claims beyond this apparently anecdotal story, Socrates appears again to change topics, noting that a member of his audience might interrupt his anecdote and ask, understandably, "Socrates, what is your affair? … For surely if you were in fact practicing nothing more uncommon than others, such a report … would not … have arisen, unless you were doing something different from the many" (20c2-5)? Socrates in effect reveals to the audience their assumptions not just about him, but also about their views of education in (and in relation to) the noble and the good for human being and citizen.

His audience appears to believe that if Socrates were doing what the sophist does, i.e., if Socrates were doing what was commonly done, then no slander would be brought against him. But, since slander has been brought against him, it seems to suggest that he was doing something "uncommon" and "something different from the many" (20c5). What Socrates does that is "uncommon" and "different from the many" is this: He focuses the art of education toward – orients it to and permits it to be determined by – the aim of achieving

the noble and the good for the human being in a way that is not concerned primarily or even equally with the goals the sophist wants to help Athenians achieve. The many appear to believe that the sophists both enjoy the goods (of glory, power, and riches) and can teach others and their children how to attain such goods themselves considered the noble and the good for human being and citizen. The sophist, Evenus, represents these beliefs of the many, for he's shown – despite being a foreigner – to enjoy reputation, influence, and wealth (or honor, power, and money). And Callias, himself a wealthy Athenian who presumably wants these goods for his sons, spends a lot of money on this sophist considered to be able, through his *technē*, to give his sons the tools (the skill or *technē*) to acquire those goods the sophists possess and promises their tutees will be, in turn, in a position to possess.

I cannot resist proposing here a hypothesis concerning the profound similarity between Callias and the contemporary parenting activity of the many as it relates to today's educational industry. Like Callias, contemporary parents make large expenditures in order that their children may be taught the skills needed to access that profession that provides the means needed for the other goods. We hardly need to mention the massive expenditure that is the cost of a four-year college. We should mention, though, the large expenditures parents undertake just to get the child into the best four-year college in the first place. The arms race for gaining admittance to the most prestigious universities reaches, today, all the way back into grade school.[13] With an aim toward getting any advantage in the competitive college admissions process – with an aim toward arming children with the credentialing that positions them for admission into the most prestigious university that will, in turn, credential them in the only way that we think will be relevant – parents today spend large sums of money on private schooling, tutors, training coaches in the

arts or sports, SAT and AP exam preparation, books and courses, etc.

Deresiewicz trenchantly criticizes the corporatization of the college admission process that spoils childhood and leads the institution of higher education to pander to the view of the instrumental value of education, a good valuable not in itself but only as a tool to financial and social power. But consider, too, Socrates' rhetorical remark to Callias. As Socrates said to Callias when asking him about the existence of a teacher of the noble and good for the human being – and in Callias' case his two sons – presumably we have "given thought to this."

Today, the answer is yes and no. We've given thought to the means. We've haven't given thought to the end or purpose – mostly because we conflate the means with the end or take the end to be the means (29d-30a-b).[14] We remain a culture of Calliases. And that may be a tragedy, but it is not a crisis. As a culture of Calliases, it is no surprise that – as any pre-major advisor of undeclared college students will tell you – students only see a very narrow set of possibilities for their studies, their majors, their loves, and their lives.[15] It is to this phenomenon – the narrowing of our culture's and students' standard world view and view of education – that I now turn my attention in my attempt to read Plato's "Apology" in the context of contemporary higher education.

3. The Human Being Higher Education Wants to Produce

Allan Bloom claimed, "every educational system wants to produce a certain kind of human being."[16] That seems, perhaps, too general in our American context. Every educational system wants to produce the certain kind of human being that is elite and enjoys wealth, power, and reputation. We might add another wrinkle: Reared within such a system, those people not elite imitate the elites and, so, most colleges are going to imitate what the elite schools do (call it

"trickle down" or mimetic education). It could seem that all of American higher education strives towards making people elite, or to provide the same educational experience as at elite schools. But perhaps that is just a veneer, because the funding isn't there to make the imitation anything more than skin deep. But, also, I doubt that Harvard provides offerings for one to major in dental hygiene or food and hotel management, both of which one can do at any number of respectable state institutions and middling liberal arts colleges.

So maybe the rhetoric is "elite" but the actual choice of majors and degree programs is "work for the elite" and enabling oneself, like Ivan Illych, to have things that look like things that the elite have.[17] And elite education nowadays is all about power and money. As we've seen Deresiewicz note, more Ivy League grads major in finance than anything else. So, the idea of education as involving any kind of character formation is long gone, and since the "elites" will run the show, we are being run by money-grubbers with no higher goals than pleasure (money as a means for pleasure). I think that this is one of the effects of "democracy" (or whatever). Without something pushing the majority of people towards virtue, there is a kind of regression to the lowest common denominator, i.e., pleasure.[18] There will always be some people, even at the elite level or at the other levels, that self-motivate, or maybe something like religion or whatever pushes them towards higher goods, but as a general public, people don't progress unless pushed, and the general culture doesn't push.

Every educational system, then, fashions itself to fit the interests of this cultural view of human being and the correlative expectations the many have for what education should be, do, or provide (here taking the aspirations of the many to be the achievement of what they see in the elite in Deresiewicz's sense). That, I think, is a finer point we could put on Bloom's telling observation. It is not as if educational

systems have an uncommon view of the noble and good for human being, a view that is – as Socrates' was – "different from the many." Indeed, educational systems (with the exception of the spiritually oriented ones) always have reflected the common view of the noble and the good for human beings and citizens. Socrates believes his divergence from this model led to the slander brought against him. We now learn more precisely that Socrates believes his bad reputation comes from having *humiliated* those the many think wise, namely, the politicians, the poets, and the manual artisans who reflect a class of person who has achieved the common view of the good life for human being (21c). These professions, I'll suggest, analogously represent those to which higher education students still aspire today – the big four industries mentioned below in my conclusion – for these professions still represent paradigmatically the common view of the good and noble for human being.[19]

As Socrates begins his explanation for why he's being slandered, he tells the audience that it's because he possesses a certain kind of "human wisdom" or a wisdom regarding what is noble and good for the human being (if we're to connect this cryptic claim back to Socrates' question to Callias). This famous part of the dialogue – in which Socrates tells the audience that his vocation to philosophize is a "reluctant" service to the god at Delphi – reveals Socrates' motive to do something "uncommon" and "different from the many," namely, examine these classes of persons (politicians, poets, craftsmen). Since Socrates wanted to understand why the Oracle declared him the wisest human being, he decided to visit with "those reputed to be wise" (21c). In a brief scene, Socrates tells us that while the many think the politicians or public officials are wise, it turns out that they "don't know *anything* noble and good" (21d, my italics). The question put to Callias returns: Who can teach the specific human virtue or the noble and good for human being and citizen?[20] Is there,

Socrates asks, a teacher who can make our children noble and good in their appropriate virtue as human being and citizen? The many presumably believe the public officials can do this. This makes some sense insofar as public officials make policies and laws that fashion the lives of human beings and citizens. Hence, public officials seem to have this knowledge regarding the noble and the good for the human being and citizen. But, "different from the many," Socrates holds that the public officials, "don't know *anything* noble and good," i.e., that they do not have the knowledge to teach the young how to achieve their appropriate virtue as human beings. We want laws and policies to provide, for example, equality of access or protection. But what is the human good we will pursue with these conditions once achieved or provided by public policy? Presumably, we have given this some thought. Presumably.

For my polemical purposes, a reason could be given for why the politicians lack the knowledge they and the many seem to believe the former possess, namely, that they prioritize the efficiency of means divorced from the end or the end reduced to the means. As the many during Socrates' time believed such lives worthy of aspiration, the sophists proved valuable. Today, as people still consider various kinds of public office positions worthy of aspiration, colleges and universities pander. Colleges offer more and more pre-professional courses of study designed to bring students to these positions responsible for making laws and policies that fashion the lives of humans and citizens: prelaw, public policy, urban planning, political science with internships, etc. remain in demand.

In his quest to find someone with more human wisdom than himself, Socrates leaves behind his examination of the public officials to consider the group thought next most likely to possess human wisdom or the ability to teach the noble and good with respect to human being and citizen. In the dialogue,

he specifically turns to the poets, "those of tragedies and dithyrambs, and the others" (22a/b). The qualifier Socrates includes in describing the class of poets is important for us. Plato doesn't just mean poets as we understand that specialized discipline today. Tragedies were often dramatic plays or writings reflecting on timeless human issues about meaning in human life. Dithyrambs were often more like songs – and we know songs, too, often aim at such human issues. The others that Socrates mentions would, I think, include the visual arts, who, unlike manual artisans, depict human themes in painting, sculpture and the like. I take the class of poets, then, to represent a class of literature and arts in general (and at the very least poets, playwrights, and the actors, directors, etc., who carry out the performance).[21] In short, we might consider the class of poets the creative geniuses most broadly construed and who today occupy – as they seem also to have during Socrates's time – a place of celebrity, honor, and influence.

This class of poets, Socrates thinks, says "many noble things" (22c). That's an interesting improvement over the public officials, for they "didn't know *anything* noble and good" (21d). Still, this group cannot explain itself, i.e., "know[s] nothing of what they speak" (22c). The class of creative artists cannot explain or convey the meaning of their art (which nevertheless may express meaningful views of the noble and good for human being).[22] We need think, of course, no further than listening to an artist try to explain the meaning of his painting or musical score, or an actor explaining how she "got into character" or tried to capture the human significance of the profound role she was honored to play, or why he holds the political or moral opinions that he does (e.g., Alec Baldwin, Robert DeNiro, Clint Eastwood, and so on, bloviating to awkward effect about their preference for this or that party or policy). The celebrity of the class of poets is due to the admiration of the many, and it grants this class an

authority to which they cannot live up. And, yet, the class of poets influences dominant images of the good and noble life for human being and citizen even when they're not saying noble things. At any rate, all great poets – indeed all great artists – "say many noble things" that can give us insight into the noble and good for human being, but they cannot teach the meaning they intuit and present. A place exists for this group in the contemporary university menu of choices, but I shall defer for a moment my hypothesis about how this group gets integrated in a world and educational culture where we often believe the arts are being squeezed out by the social, material, and technical sciences.

The final group Socrates examines is the group rising to greater prominence today, namely, the craftsman or "manual artisans" (22d). This group during Socrates' time probably included blacksmiths, masons, tailors, cobblers, carpenters, etc. We could extend the group, today, to include plumbers, electricians, mechanics, and so on. Interestingly, manual artisans construed in this way are rarely thought by the many as wise or capable of teaching the noble and good of human being and citizen. We find such blue-collar folks very useful and valuable to that extent, but (and perhaps foolishly on our part) not wise. Such was the case in Socrates' day, too, for here Socrates has left the realm of common opinion in his quest to discover if there is a class of people who possess more human wisdom than he does. The manual artisans differ from the poet class in two ways. First, the manual artisans can explain their craft and, indeed, Socrates holds, "they at least had knowledge of many noble and good things" (22da-2). Second, however, it is not clear that they say "many noble and good things" regarding the noble and good for human beings, for they "did have knowledge of things which I didn't have knowledge of" (22d3-4). So, they're both better and worse than the poets. The craftsmen can explain what they know but

what they know isn't connected to the noble and the good for human being and citizen. The manual artisans nevertheless share with the class of public officials and the class of poets the flaw of thinking that because they have a skill in one area that they're also wise in other things, namely, the noble and good for human being and citizen (22d6-e1).

Socrates' reservation about the craftsman moves quickly, but his criticism seems at least as relevant today if we recast the category of "manual artisans" as STEM, which dominates today's culture and the landscape of higher education. Students flock to the money and power that is found in the *technē* that can be learned in the applied, material, and technical sciences – included here are nurses, medical doctors, physicians, big pharmaceutical production, technology, engineering, and math. Even the mathematical studies considered in STEM are now in the service of craft or *technē*. Such math is valuable *as* applicable to conducting economic affairs such as finance, accounting, consulting, or the mathematics useful for the statistical analyses needed by scientific and engineering studies. The math thought valuable today is the math not of the divided line but the math of and for those who return to the cave. There's no shortage of figures in the contemporary class of "manual artisans" who believe themselves authorized to speak and to speak legitimately on matters related to the noble and the good for human being and citizen (e.g., Bill Gates, Steve Jobs, Mark Zuckerberg, Warren Buffet, George Soros, etc.). As there is big money and much power to be gained from these professions, colleges and universities dump big money and resources into building up the disciplines and departments that provide instruction required for becoming credentialed in them.

My claim is not that this is not a problem. My claim – and my reason for plodding through Plato's "Apology" in this

polemic – is that this is not a *new* problem. It is not a state of crisis. But it *is* certainly an undesirable state.

Folks in higher education increasingly talk about students being oriented toward professionalism and colleges pandering to this orientation. There is much hand-wringing over the reduction of higher education to a mere means that teaches us not how to think but what to know so that we can acquire the skills that credential students so that they can acquire the means of wealth, power, and reputation. This problem seems at least as old as Plato's "Apology." There's no crisis of higher education or new threat to higher education by the seeming monolith of STEM. At best, on this score, we have a difference in degree – and not in kind – between our world and the one of Socrates. The young have always aspired to these so-called practical positions and professions because these "practical" courses of study and the professions they feed paradigmatically seem to represent a particular – and particularly dominant and enduring – view of the noble and good for the human being and citizen. The so-called crisis in higher education targets the effect rather than the cause, the symptom rather than the disease. Current structures and practices in higher education simply reflect the cultural catastrophe of an increasingly narrowing of interests and values, which is better described as an increasing reduction of the noble and the good for human being and citizen to just that which the sophists promised Callias his children would achieve (glory, power, riches).[23]

Conclusion: The Children of Callias?

What's interesting to me, further, is that these three paradigm ways of living critiqued by Socrates roughly map onto the lives of contemporary university students at least in the United States. Students feel enormous pressure to enter the world of public policy (that now intrinsically includes legal studies) or STEM. These groups – these professions that

represent the public officials and manual artisans – influence what we believe valuable and who we want to be or what we want to do with our lives. Such dominant models of life restrict our view of the noble and good and narrow our view of what we (think we) can or want to become. The menu on offer by universities looks appetizing because these professions tend to raise our income and status, and income and status are thought by the common and the many to be the noble and good for human being (as Evenus and Callias represent). Deresiewicz presents a staggering statistic related to this aspiration of students in the U.S. and their increasing entry into STEM studies and careers:

> With credentialism comes a narrow practicality that is capable of understanding education only in terms of immediate utility and that marches … beneath a single banner: economics. In 1995, economics was the most popular major at three of the top ten universities or top ten liberal arts colleges … In 2013, it was biggest at a minimum of eight and as many as fourteen. … It was the biggest at four of the top ten liberal arts colleges … It was almost as popular among the next ten schools on each list, the rest of the top twenty, representing the largest major at as many as six of the universities and six more of the colleges for a grand total of 26 of the 40 schools on the two lists combined. Sixty-five percent, for just a single major: a stunning convergence.

Not surprisingly, careers in finance followed "naturally." Deresiewicz continues:

> In 2007, about half of Harvard seniors who had full-time jobs lined up … were going into one of [finance or consulting]. … By 2010, nearly half of Harvard

> graduates were still going into one of those fields, as well as more than half of those at Penn and more than a third at Cornell, Stanford, and MIT. In 2011, 36 percent of Princeton graduates went into finance alone.

Deresiewicz astutely observes along with Ezra Klein that consulting firms and Wall-Street alike have figured out something about contemporary students from "elite" colleges and universities – and exploited it. They've figured out that

> colleges are producing a large number of very smart, completely confused graduates. Kids who have ample mental horsepower, incredible work ethics, and no idea what to do next … We have constructed an educational system that produces highly intelligent, accomplished twenty-two-year-olds who have no idea what they want to do with their lives: no sense of purpose and, what is worse, no understanding of how to go about finding one. (20, 25)

Where, however, does the class of the "poets" fit with our students today? This group seems to undermine my hypothesis precisely because they are widely considered today to be victims of this system. Isn't it said – lamented – that studies related to the class of poets get squeezed out by studies related to the class of public officials and manual artisans? Isn't this dying off of the class of the poets furnished as evidence of the crisis – itself a symptom of that which we mistakenly consider the disease – of higher education? I noted earlier that it's commonplace today to note that fewer students choose majors outside public policy or STEM and that university development and offerings reflect that demand in the allocation of resources.

But a place exists for the class of the poets, since the market that privileges the efficiency of means – *technē* – must provide menu options for those who question, oppose, or shun the practical life. And there always will be young people, who, for whatever reason, favor the "enlightened" worldview of the artist, creative genius, and the humanist. As Francois Cusset has put the matter in the context of explaining the attractiveness of postmodern literary and cultural studies – a major contemporary class of the poets in Plato's sense (22c2-3) – universities need to offer, "an alternative to the conventional world of career oriented choices," i.e., they must market themselves to that small but enduring class of consumers who, "choose the more personal and committed choice of a 'calling' instead of a selfish 'career'."[24]

According to Cusset, the flowering of the "learn to earn" era started in earnest in the United States in the 1970s. During this time, the university began to see itself "on the model of the new service economy." Also during this time, the new class of poets, in the form of postmodern humanities and cultural studies, indeed resisted the practical programs offered by public policy and STEM. A very invisible hand of the university market thus reached out and pulled toward itself these studies that challenged the university system's prioritization of practical and professional programs. It is Cusset's provocative assessment that

> in its new capacity to absorb what in the past would have threatened its 'values', [the contemporary] university is the very one that would soon develop feminist studies in order to attract female students and research on ethnic or sexual minorities in order to win points with these new fringes of the student clientele … For it was necessary to develop the products that would sell best. The absorption of the enemy for the purpose of turning its energy to profit.[25]

What Socrates was doing that was "uncommon" and "different from the many" was using the *technē* of teaching in connection with and in the service of the end it was meant to perform, namely, developing the good and noble for the human being. But Socrates' view of education required a rejection of the world view of the many – the sophists, the classes of public officials, poets, and craftsmen, as well as the sports hero, who, as Socrates put it, "[only] makes you think yourself happy" (37e). We at least should want to demand that education makes our students more informed about their choices and the implications of those choices.

Socrates' view of the art [*technē*] of education was that it aimed at an end that required putting ethics and character first (the noble and the good for human being and citizen). The development of the appropriate human excellence should not be reduced to a learning outcome, should not be made servile to a core curriculum or reduced to a mere veneer of a business or engineering school degree. The noble and the good for human being is not an "efficient means" but the end itself. As Socrates is said to have said, and I quote at length:

> Men of Athens, … I am your friend … and as long as I draw breath and am able I shall not cease … to exhort you and in my usual way to point out to any one of you whom I happen to meet: Good Sir, … are you not ashamed of your eagerness to possess as much wealth, reputation, and honors as possible while you do not care for nor give thought to wisdom or truth or the best possible state of your soul. … [If] I do not think he has attained the goodness that he says he has, … I shall reproach him because he *attaches little importance to the most important things and greater importance to inferior things* … I go around doing nothing but persuading both young and old among you not to care

> for your body or your wealth in preference to or as strongly as for the best possible state of your soul, as I say to you: "Wealth does not bring about excellence (*arête*) but excellence makes wealth and everything else good for men, both individually and collectively." … I say that it is the greatest good for a man to discuss virtue every day and those other things about which you hear me conversing and testing myself and others, for the unexamined life is not worth living for men… (Apology 29d-30a-b, 38a).

This is the goal of education, according to Socrates. This is the reason Socrates earlier said that it was "a fine thing to be able to teach people."

Socrates died for his view of education. Perhaps something of us is dying from ours.

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was to be found precisely in its unconventional way of promoting conversation about the consequences of higher education made subordinate to professional training.

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[1] A. Delbanco, *College: What it was, is, and Should Be* (Princeton: Princeton University Press, 2012), pp. 142-43.
[2] I thank my friend and colleague, Brian Harding, for bringing this historical date and narrative to my attention. That piece can be found here: C. Elliot, "The New Education," *The Atlantic*, February 1869 issue. https://www.theatlantic.com/magazine/archive/1869/02/the-new-education/309049/
[3] As William Deresiewicz writes, "Higher education increasingly resembles any business now. What pays is in; what doesn't is under the gun. Instruction is regarded as a drain on resources. 'Efficiency' in the transmission of knowledge, not the unsaleable craft of teaching, has become the cardinal value. Professors are being replaced with adjuncts and other temporary, low-wage workers, the cost to educational quality be damned. Academic units are seen as 'revenue centers'; the one's that can't pull their weight – much of the liberal arts – are slated for downsizing or outright elimination. Science is king, but not just any science … The holy grail is technology transfer: scientific investigation … that is capable of being parlayed into profit." W. Deresiewicz, *Excellent Sheep: The Miseducation of the American Elite and the Way to a Meaningful Life* (New York: The Free Press, 2014), p. 67.
[4] Ibid., p. 69.
[5] Ibid., pp. 20-25. The details regarding Dersiewicz's claims are included below in the conclusion to this essay.
[6] Ibid., p.70.
[7] Deresiewicz writes, "The fact is that elite schools have strong incentives *not* to produce too many seekers and thinkers, too many poets, teachers, ministers, public-interest

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lawyers, nonprofit workers … – too much selflessness, creativity, intellectuality, or idealism. … They do nothing … to challenge the values of a society that equates virtue, dignity, and happiness with material success … Nor do they do much to help kids find their way to alternative careers. I've been told again and again at school after school that career service offices have little or nothing to say to students interested in something other than the big four of law, medicine, finance, and consulting. … And some schools go even further. Stanford offers companies special access to its students for a fee of ten thousand dollars – and it's hard to believe that Stanford is the only one. … Of course, colleges do nothing to discourage students from pursuing lucrative careers, no matter how personally unfulfilling or socially destructive. … Now schools can have it both ways: the meritocrates *are* the future donors, as long as you select and train them right." Ibid., pp. 71-2.

[8] A. Deblanco, *College*, p. 46.

[9] Carol Poster, notes that Protagoras proceeded in precisely this way, using a *technē* known as *orthoepeia* or the correct use of words. She writes, "Protagoras was interested in "orthoepeia" (the correct use of words). Later sources describe him as one of the first to write on grammar (in the modern sense of syntax) and he seems interested in the correct meaning of words, a specialty often associated with another sophist, Prodicus, as well. In the "Protagoras," the Platonic dialogue named after the famous sophist which has both Protagoras and Prodicus as participants, Protagoras is shown interpreting a poem of Simonides, with special concern for the issue of the relationship between the writer's intent and the literal meanings of the words. This method of interpretation was one which would be especially useful in interpreting laws and other written witnesses (contracts, wills, and so forth) in the courtroom. Unfortunately, we don't have any actual writings by Protagoras on the topic." C. Poster, "Protagoras,"

Internet Encyclopedia of Philosophy https://www.iep.utm.edu/protagor/

[10] The rejection of sophistry is often taken to be philosophically important by philosophical commentators on Plato's "Apology." And it *is* important. But there's more to his refutation of the slander, which I'll explore below.

[11] https://www.ancient.eu/Paros/

[12] Plato, *The Five Dialogues*, trans. G. M. A. Grube (Indianapolis: Hackett Publishing, 2002), p. 25n6.

[13] W. Deresiewicz, *Excellent Sheep*, especially chapter two.

[14] As a colleague of mine noted on review of this paper, perhaps not having a determined answer to that question is inseparable from being a democracy? Recall book VIII of *The Republic*. There, Socrates talks about how in a democracy people are free to live any life they wish and educate their children however they see fit and independently of any "thick" conception of the good. Instead, there is only the thin and vague good of freedom but a cultural silence regarding what one should do with that freedom. We have something similar in America; there is no thick conception of the good other than freedom or absence of interference. Our Bill of Rights, for example, presents a list of what congress can't do. But we have no Bill of Obligations listing what citizens should or must do. In a way, our first amendment enshrines this "thin" view of the good in law.

[15] See note 5 above.

[16] Cited in W. Deresiewicz, *Excellent Sheep*, p. 15.

[17] "Essentially, though, it was the same as with all people who are not exactly rich, but who want to resemble the rich, and for that reason only resemble each other: damasks, ebony, flowers, carpets, and bronzes, dark and gleaming – all that all people of a certain kind acquire in order to resemble all people of a certain kind." Tolstoy, *Death of Ivan Illych*, p 57. Sourced on Thursday 7 February 2019 from

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https://web.stanford.edu/~jsabol/existentialism/materials/tolstoy_death_ilyich.pdf

[18] Deresiewicz, *Excellent Sheep*, p. 4. He writes, "A word on what I mean when I speak of the elite. I don't intend the term as it is often now deployed as a slur against liberals, intellectuals, or anyone who disagrees with Bill O'Reilly, but simply as a name for those who occupy the upper echelons of our society: conservatives as well as liberals, businesspeople as well as professionals, the upper and the upper middle classes both - the managers, the winners, the whole cohort of people who went to selective colleges and are running society for their exclusive benefit."

[19] In what follows, my claim is not that the analogies that I draw with these classes maps one-to-one onto our contemporary context.

[20] West, *Plato's Apology of Socrates: An Interpretation, With New Translation* (Ithaca: Cornell University Press, 1979), p. 109.

[21] A. Nehamas, "Plato and The Mass Media," *The Monist*, 71.2 (April 1988), pp. 214-234: p. 223.

[22] A real exception exists to Plato's characterization and brief dismissal of the poets (about whom he speaks more directly and critically in his "Republic"). My friend and colleague, Malachi Black provides a very good example to the contrary in his contribution to the session, "The Language of Goodness," in The University of San Diego's three semester series examining "Beauty, Goodness, and Truth." https://www.youtube.com/watch?v=sYzC8TWzH3Y

[23] See note 7 above.

[24] F. Cusset, *French Theory: How, Foucault, Derrida, Deleuze, & Co. Transformed the Intellectual Life of the United States*, trans. J. Fort (Minneapolis: University of Minnesota Press, 2008), p. 226.

[25] Ibid., p. 44-5.

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Life 3.0 – Being Human in the Age of Artificial Intelligence

Author: Max Tegmark
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Reviewed by Christina de Vreeze, Ph.D. Candidate, Salve Regina University

Human beings are not born, *tabula rasa*, as the philosopher Locke purported. We come to this life with a set of brain structures that are optimized for certain tasks. This fact is at the center of the neuroscience that studies AI.

Max Tegmark posits in, *Life 3.0 – Being Human in the Age of Artificial Intelligence,* that AI will transform every aspect of our lives, from our own bodies and minds to political and economic structures, and this transformation will occur at an unforeseeable time and on an unpredicted scale. Therefore, contemporary society has the responsibility to decide *now* how, in what form and to what extent AI will play a role. While the engineering world moves forward at a faster and faster pace, the political quarter remains ignorant and inactive with respect to the developments of the technology. Machine

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learning, deep learning and artificial intelligence are still concepts unknown to the large majority of the citizenry while its impact on the economy as well as its employment in military action and political systems will be of paramount importance. The writer provides an extensive overview of terminology, current scientific debates and, as a physicist and cosmologist, he gives the reader abundant sets of examples, hypotheses, definitions and technical principles related to AI.

The book opens with a fable describing a hypothetical future world inhabited by humans where the Omega Team, working for a corporation focused on creating artificial intelligence, builds an AI nicknamed Prometheus. On the first day, the main computer's AI is launched and astounds the Omegas by successfully earning 1M$ daily succeeded by 10M$ monthly, successfully disrupting established companies like Amazon Mechanical Turk, Time Warner Disney, Comcast and Fox while emulating Amazon, Google or Microsoft. Backed up by the Omegas, the AI establishes shell companies, deploying disinformation campaigns and employing real lawyers to divert documents fed into the AI. During this process, as anticipated, Prometheus learns to improve its own hardware. To avoid a breakout that might lead to escalation through self-modification and replication, the Omegas prevent Prometheus from controlling robotic construction facilities by hiring world-class scientists and engineers to do that. Furthermore, it is strictly prohibited to connect Prometheus to the internet. Instead files are directly inputted to provide it information.

What the world does notice, however, is the high-tech boom that disrupts the economic balance and accelerates the

diminishing manual labor workforce. At this stage the Omegas master the global economic order, including the spheres of media and education. They implement a plan that employs psychological behavioral strategies in several phases. Their intention is to seize the world's existing power structures and achieve global human equality by providing a basic universal income to combat the unemployment caused by the technological surge.

A non-governmental organization called the Humanitarian Alliance composed of a group of international companies initiates a set of projects that provide for education, health, infrastructure and high quality social services. Military spending under those conditions becomes redundant and social holistic equality eradicates all sorts of conflicts. As the Alliance implements its perfectly balanced system, national governments become obsolete. Under the guidance of the Omegas, AI has made it possible to establish a universal peaceful balance on earth. And so humanity gives birth to AI but without having engineered cognitive abilities into the system.

This fable is a portrait of the ideal world Tegmark portrays and it provides a framework for the essential themes discussed in his book. He then goes on to approach the subject from the viewpoint of both the physicist and cosmologist and examines AI as it is now. In a conversational style, Tegmark repeatedly questions when and how artificial general intelligence (AGI) will be a reality. He claims that AI is the logical evolutionary next step in life on planet earth and builds his theory around its development. As life in the universe started 13.8 billion years ago with only 4 billion of those years

on earth, he posits that the first phase – Life 1.0 – contained only bacteria that sought merely to replicate and survive. Life 2.0 is comprised of humans who possess culture and employ myth to communicate and use their minds to eventually design their own software. And Life 3.0 corresponds to the phase that designs its own hardware and is, therefore, "the master of its own destiny."

According to Tegmark – who simplifies many technical definitions for the sake of reaching the widest readership possible – the definition of intelligence is the ability to accomplish complex goals. This definition raises the question how we, as human beings, differ from machines, especially when AI has shown its capacity to win at complex games such as Go or chess, navigate roadways with driverless cars and instantaneously translate over a hundred world languages. Natural language processing is highlighted as the fastest developing field in AI. To execute these tasks, AI appears to employ *intuition, creativity* and *strategy*, characteristics typically tagged as human-specific.

Tegmark also postulates that biological memory is present in the brain while in AI it is imbedded in computation. Thus both human beings and AI systems have the ability to learn. The learning that takes place in biological systems occurs through interaction with the environment and through the production of myths that employ heuristic methods. AI's deep reinforcement learning system employs machine learning and mimics how humans learn. Those practices stem from the scientific discipline of behaviorist psychology that focuses on how software agents can be trained to perform in order to obtain a cumulative reward.

Tegmark goes on to discuss five broad categories: AI-safety research, law, legislation, the military and the employment–income sector. He explains how AI can be made safer by having it employ better decision making criteria within existing socio-economic models and discusses, among other topics, the *ethics* of machine responsibility, the disbursement of AI for military purposes, the advent of small AI-powered killer drones and the possibility of a universal basic income to address technology driven inequality.

Critical Analysis

Tegmark's book forcefully argues that AI is a critical component of today's *Zeitgeist*. Overall, Tegmark's work refrains from shedding light on the philosophical and religious foundations that have explained the development of mankind together with technology. This theme has been examined under the prism of the humanities from the time of the Indian Upanishads and the Greek Milesian philosophers through to today's modern humanism.

The title under review seems to promise an answer to the question of what it means to be human in the age of artificial intelligence, but it does not analyze, to the fullest possible extent, basic topics such as objectivity, free will, the soul, privacy issues, understanding, consciousness, agency and personhood. Max Tegmark describes mankind's intimacy with technology. Despite the absence of serious philosophical argumentation, Tegmark's text remains an informative read cast in an original conversational style that effectively shed light on an uncertain future.